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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,096	09/28/2005	Michael H Johnson	304-43048-US (D5407-288)	1119
25397	7590	06/20/2007	EXAMINER	
DUANE MORRIS LLP			BOMAR, THOMAS S	
3200 SOUTHWEST FREEWAY				
SUITE 3150			ART UNIT	
HOUSTON, TX 77027			PAPER NUMBER	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,096	<b>Applicant(s)</b> JOHNSON, MICHAEL H	
	<b>Examiner</b> Shane Bomar	<b>Art Unit</b> 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/2/07, 3/7/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 162.
2. The drawings are also objected to because of poor line quality and copier machine marks in the dark regions of the figures make it difficult to discern between the different parts of the invention.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The disclosure is objected to because of the following informalities:
  - a. in the next to last line of paragraph 0037, the recitation of "injected fluid 172" should be --injected fluid 174--;
  - b. the brief description of the drawings only mentions figures 1-6, although there are more figures described in the specification and included with the drawings;

- c. furthermore, the figures contain Figs. 7, 7A, 7B, although the specification describes a Fig. 7C and no Fig. 7.

Appropriate correction is required.

### ***Claim Objections***

- 5. Claims 4, 8, 11, 15, and 16 are objected to because of the following informalities:
  - a. the recitation of “is positions adjacent a site” in each of claims 4, 11, and 16 should most likely be --is positioned adjacent a site--;
  - b. in claim 8, the recitation of “through injection zone” in line 5 should be --through the injection zone--; and
  - c. in claim 15, the last word should be --conduit--, not “conduits”.Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 3. Claims 1, 3-7, and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,829,520 to Johnson.

Regarding claims 1 and 15, Johnson discloses a method and system of injection well construction and completion comprising drilling a borehole through an injection zone of a

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formation (see Fig. 1); running a casing (20, 200) into the borehole, wherein the casing includes an extendable assembly (26, 212, 214, 216) comprising a fixed portion and a movable portion having a filter media (135) at its distal end so that the assembly is positioned adjacent a site in the injection zone to form a conduit once extended (see Fig. 4); providing well completion tubing and equipment (see Fig. 1); and injecting fluids into the well through the conduit (see col. 13, line 45 through col. 14, line 55).

Regarding claim 3, an injection pressure exceeds a fracture pressure of the injection zone (see col. 13, line 66 through col. 14, line 8).

Regarding claims 4-7 and 16-19, a plurality of assemblies (26, 212, 214, 216) are included over a square foot area of the casing so that each extendable assembly is positioned adjacent a site in the injection zone (see Figs. 5 and 6).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of US 5,228,518 to Wilson et al.

Johnson teaches the method of injection well construction and completion that comprises extendable assemblies as applied to claim 1 above. It is not taught that the casing is cemented in place after the assemblies are extended but before the injecting step.

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Wilson et al teach a casing string with extendable assemblies similar to that of Johnson. Wilson et al further teach that the casing is cemented in place after the assemblies are extended but before any other well completion step is performed (see col. 3, lines 38-65). It would have been obvious to one of ordinary skill in the art, having the teachings of Johnson and Wilson et al before him at the time the invention was made, to modify the method taught by Johnson to include the step of cementing prior to injecting of Wilson et al. One would have been motivated to make such a combination because the casing would be centralized within the borehole prior to cementing taking place, or any other completion step being preformed, as taught by Wilson et al.

6. Claims 8 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of US 6,631,764 to Parlar et al.

Regarding claim 8, Johnson teaches a method of injection well construction and completion comprising drilling a borehole through an injection zone of a formation (see Fig. 1); running a casing (20, 200) into the borehole, wherein the casing includes an extendable assembly (26, 212, 214, 216) comprising a fixed portion and a movable portion having a filter media (135) at its distal end so that the assembly is positioned adjacent a site in the injection zone to form a conduit once extended (see Fig. 4); and injecting fluids into the well through the conduit (see col. 13, line 45 through col. 14, line 55). It is not taught that the conventional drilling fluid used to drill the borehole is displaced with a "Drill-In Fluid".

Parlar et al teach a method of well construction and completion similar to that of Johnson. Parlar et al further teach the step of displacing a conventional drilling fluid with a drill-in fluid (see col. 3, line 65 through col. 4, line 7). It would have been obvious to one of ordinary skill in the art, having the teachings of Johnson and Parlar et al before him at the time the invention was

made, to modify the method taught by Johnson to include the step of displacing drilling fluid with a drill-in fluid of Parlar et al. One would have been motivated to make such a combination because the method would provide reduced cost and improved fluid management practices, as taught by Parlar et al in column 4, lines 15-20.

Regarding claim 10, the combination applied to claim 8 above teaches an injection pressure exceeds a fracture pressure of the injection zone (see col. 13, line 66 through col. 14, line 8 of Johnson).

Regarding claims 11-14, the combination applied to claim 8 above teaches a plurality of assemblies (26, 212, 214, 216) are included so that each extendable assembly is positioned adjacent a site in the injection zone (see Figs. 5 and 6 of Johnson).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Parlar et al as applied to claim 8 above, and further in view of Wilson et al.

The combination applied to claim 8 above fails to teach that the casing is cemented in place after the assemblies are extended but before the injecting step, just as Johnson alone failed to teach with regards to claim 2 above.

For analogous reasons and motivation, the Wilson et al reference can be combined with the aforementioned references to advantageously supply the missing limitation (see rejection of claim 2 above).

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***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shane Bomar/  
Patent Examiner  
Art Unit 3672

June 8, 2007